

# DIABETES IN THE DISTRICT OF COLUMBIA

## Diabetes Prevention and Control Program

### How Many People Does Diabetes Affect?

Based on 2010 estimates from the Centers for Disease Control and Prevention (CDC), 8.7% of the United States (US) population – nearly 25.8 million people – has diabetes. More than 7 million of the 25.8 million are undiagnosed.<sup>1</sup>

### Mortality Associated with Diabetes

Diabetes ranked as the sixth leading cause of death in the District of Columbia in 2008. In 2008 and 2009 diabetes accounted for an average of 146.5 deaths per year in the District. This results in a rate of 24.6 deaths per 100,000 residents;<sup>11</sup> this is above the national rate of 20.9 deaths per 100,000 residents.<sup>12</sup> Mortality associated with diabetes is highest in District wards 4, 5, 7, and 8 (Figure 1).<sup>11</sup> In 2008 the diabetes death rate for blacks was 37.2 per 100,000 population; almost five times the rate for Whites, 7.3 per 100,000 population.

### Diabetes Mortality Rates by Ward



Figure 1. 2008 and 2009 average diabetes mortality rates by District Ward of residence; Source: DC DOH Vital Statistics...

### Prevalence of Diabetes

8.3% of the District's residents report having been diagnosed with diabetes.<sup>6</sup> This is comparable to the 8.7% of the total US population who have diabetes; see Figure 5.<sup>7</sup> Based on the 2010 US Census population estimate of 601,723 District residents<sup>8</sup>, over 52,000 District residents have been diagnosed with diabetes. The prevalence of diabetes is highest in District wards 4, 5, 7, and 8 (Figure 2).<sup>6</sup>

### Diabetes by District Ward

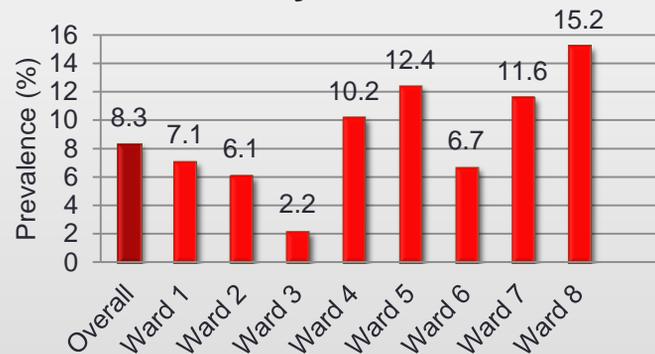


Figure 2. Prevalence of Diabetes by ward of residence in the District of Columbia; Source: DC DOH, BRFSS 2010

### Financial Costs of Diabetes

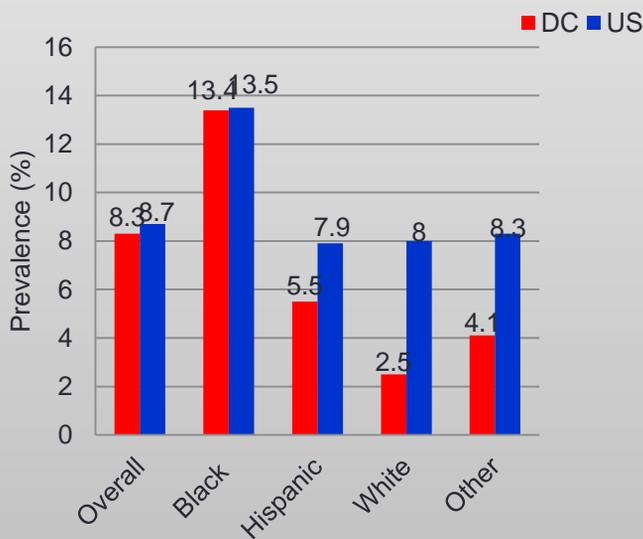
In 2007, the costs of diabetes in the United States were estimated at \$174 billion; with \$116 billion in direct costs (costs of medical care and services) and \$58 billion in indirect costs (costs of reduced productivity, short- and long-term disability, and premature death).<sup>5</sup> Persons with diabetes have medical expenses that are 2.3 times higher (\$11,744) than people of the same demographic without diabetes (\$5,095).<sup>5</sup> Using these estimates the additional medical cost of caring for the 52,000 District residents with diabetes is \$346 million a year.

## Disparities in Health Status

Individuals in the following race and ethnic groups have a higher risk of developing type 2 diabetes or gestational diabetes: African Americans, Hispanic/Latino Americans, American Indians, Alaska Natives, and Asian Americans, particularly Native Hawaiians and other Pacific Islanders.<sup>1,2</sup> In the District there is a 10.9% disparity in prevalence when comparing blacks (13.4%) to whites (2.5%). This disparity in the District population is almost more than twice the 5.5% disparity in the national population.<sup>6,7</sup>

The risk of developing diabetes is higher for individuals in lower income and education level groups.<sup>6,7</sup> In both the District and nationwide, the prevalence of diabetes among individuals with incomes less than \$15,000 is between 2.8 and 3.68 times higher than among those with incomes greater than \$50,000.<sup>6,7</sup> In the District, the prevalence of diabetes among individuals who did not graduate from high school is 20.6%, while the prevalence among individuals who graduated from college is 4.7%.<sup>6,7</sup>

### Diabetes Prevalence by Race



**Figure 3. Prevalence of Diabetes by Race in the District of Columbia and United States;** Source: DC DOH, BRFSS 2010; CDC BRFSS, 2010

## Diabetes Related Conditions

Some common conditions diseases or disorders that individuals with diabetes have an increased risk of developing include **hypertension** (high blood pressure), abnormal **cholesterol** levels, **heart attacks**, and **strokes**. In the District, individuals with diabetes are three times more likely to have high blood pressure and almost twice as likely to have high cholesterol when compared to individuals who do not have diabetes.<sup>6</sup> **Diabetes nephropathy**, a kidney (renal) disease, that often develops as a complication of diabetes. Diabetes nephropathy can progress to **End Stage Renal Disease (ESRD)**, a life-threatening condition. Patients with ESRD must regularly receive kidney dialysis treatments to remove wastes from their blood. In 2010, both the number of newly diagnosed ESRD cases (419) and the total number of diabetes related ESRD patients (641) in the District, were at rates nearly twice that of nearby states (Maryland, Virginia, and West Virginia) or the US as a whole (Figure 4).<sup>9,10</sup>

**Figure 4. 2010 Incidence and Prevalence of End Stage Renal Failure (ESRD)**

	ESRD Incidence Rate	Diabetes Related ESRD Prevalence Rate
District of Columbia	69.6 per 100,000	106 per 100,000 (641 patients)
Maryland	42.4 per 100,000	53 per 100,000 (3059 patients)
Virginia	36.9 per 100,000	51 per 100,000 (4106 patients)
West Virginia	36.2 per 100,000	47 per 100,000 (875 patients)
United States	37.54 per 100,000	68 per 100,000 (210,475 patients)

Source: United States Renal Data System 2011; Mid-Atlantic Renal Coalition ESRD Network 5, 2010 annual report

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District of Columbia Department of Health  
Community Health Administration  
Diabetes Prevention and Control Program

[www.doh.dc.gov/diabetes](http://www.doh.dc.gov/diabetes)

899 North Capitol Street, NE  
Washington, DC 20002  
202-442-5925

GOVERNMENT OF THE DISTRICT OF COLUMBIA



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